Conclusion: A set of 18 QIs based on the EULAR recommendations for SLE was developed to be used towards improving care in SLE. Initial real-life data suggest variable degree of adherence with higher adherence resulting in reduced adverse outcomes.

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Figure 1.

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POS0765

LABORATORY RATIOS: A SUBROGATE BIOMARKER FOR DETECTION OF INFECTION IN SLE PATIENTS

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Background: The most common complication in patients with SLE is infection, and its clinical presentation is often indistinguishable from SLE flares. Therefore, laboratory ratios have been evaluated to differentiate between those events. Among them, ESR/CRP¹, neutrophil/lymphocyte (NLR)², and platelet/lymphocyte (PLR)³ ratios have been previously assessed with acceptable performance; however, there is no validation of those ratios in our SLE population.

Objectives: To examine the predictive capacity of infection of the lymphocyte/C4 (LC4R), lymphocyte/C3 (LC3R), and ferritin/ESR (FER) ratios in SLE patients, and to evaluate the performance of ESR/CRP, NLR, AND PLR ratios in our SLE population.

Methods: We conducted a cross-sectional study of SLE patients admitted to the emergency service at Hospital San Vicente Fundación (HSVF). The HSVF ethics committee approved the execution of the project.

Patients were categorized into four groups according to the main cause of hospitalization: (1) infection, (2) flare, (3) infection and flare and, (4) neither infection nor flare. We calculated the median values of the ratios and their respective interquartile ranges for each group. Then, we compared those summary measures using the Kruskal-Wallis test. Subsequently, we assessed the predictive capacity of infection of each ratio using ROC curve. Finally, we carried out a logistic regression model.

Results: A total of 246 patients were included, among them 90.7% were women. The median age was 28 years (IQR: 20-35 years). Regarding the outcomes, 37.0% of the patients had flares, 30.9% had neither infection nor flare, 16.7% had an infection and, 15.5% had simultaneously infection and flare. When compared the four groups, statistical significance ($p < 0.05$) was observed. Area under the ROC curve (AUC) for infection prediction was as follows: 0.752 (sensitivity 60.5%, specificity 80.5%) for LC4R, 0.740 (sensitivity 73.2%, specificity 68.3%) for FER, 0.731 (sensitivity 77.6%, specificity 80.5%) for LC3R. In the logistic regression modeling, we observed that an increase in the risk of infection was associated with an LC4R below 66.7 (OR: 6.3, CI: 2.7 – 14.3, $p < 0.0001$), a FER greater than 13.6 (OR: 5.9, CI: 2.8 – 12.1, $p < 0.0001$) and an LC3R below 11.2 (OR: 4.9, CI: 2.4 – 9.8, $p < 0.0001$).

The ESR/CRP and PLR performed poorly with an AUC of 0.580 and 0.655, respectively. In contrast, the NLR showed better performance (AUC of 0.709, with a sensitivity of 80.2% and specificity of 55.7%).

Figure 1. ROC curves of the evaluated ratios

Conclusion: These laboratory ratios could be easy to assay and inexpensive biomarkers to differentiate between infection and activity in SLE patients. The LC4R, FER, and LC3R have a significant diagnostic performance for detecting infection among SLE patients. Of the ratios previously evaluated, ESR/CRP, LPR, NLR, only the latest has an adequate performance in our population.

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POS0766

CLUSTER ANALYSIS AND COMPARISON OF CUMULATIVE DAMAGE BY DIAPS IN A SINGLE CENTER COHORT OF APS PATIENTS

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